REMARKS

This Amendment is submitted in response to the Office Action mailed on September 15, 2003. Claims 1, 12 and 18 have been amended, and claims 1-21 remain in the present application. In view of the foregoing amendments, as well as the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

Claims 1, 3, 5-11 and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Smith et al., U.S. Patent No. RE 34,796. Claims 1, 3, 5-11 and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Charas et al., U.S. Patent No. 5,548,813. Lastly, claims 2, 4, 12-17 and 19-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Smith et al. in view of Carloni et al., U.S. Patent No. 5,815,115. While Applicants respectfully traverse these rejections, Applicants have amended each of independent claims 1, 12 and 18 to more sharply define the present invention over the prior art of record and respectfully request that the rejections be withdrawn.

In particular, Applicants have amended each of independent claims 1, 12 and 18 to recite that each power amplifier coupled to an antenna element comprises a "multi-carrier" linear power amplifier. Support for this amendment is found in Applicants' disclosure at Page 6, lines 3-11 for example. Applicants respectfully submit that the combination of elements recited in each of independent

claims 1, 12 and 18, and claims depending therefrom, is not taught or suggested by the prior art of record and the rejections should be withdrawn.

Smith et al. is directed to an antenna switching system for switching a cell's base station transmitter between odd and even sectors of a cell, i.e., sectors 1-6 (see Fig. 6). Once the odd or even sector is selected through odd/even selector switch (201), the signal is switched by the odd switch matrix No. 1 (203) or even switch matrix No. 2 (203) to the broadband antenna combiner associated with the antenna (220) that is selected. The odd/even sector switch (201), matrix No. 1 switch (203) and matrix No. 2 switch (203) isolate one antenna (220) from another so that only one of the antennas (220) is active at one time. (See Column 1, line 68 through Column 3, line 2). Accordingly, Applicants submit that Smith et al. does not disclose each of the odd or even antennas (220) being simultaneously coupled to a common feed signal as asserted by Examiner since Smith et al. clearly discloses that each antenna (220) is isolated from another so that only one of the antennas (220) is active at one time.

Also, Smith et al. teaches a single linear power amplifier (205) coupled to a plurality of antenna elements in each isolated antenna (220). Smith et al. is completely silent with respect to the linear power amplifier (205) comprising a "multi-carrier" linear power amplifier as claimed by Applicants. Applicants respectfully submit therefore that Smith et al. taken alone, or in combination with the other prior art of record, fails to teach or suggest a distributed antenna array or

antenna structure comprising a plurality of antenna elements configured in an antenna array with each of the antenna elements in the antenna array being simultaneously coupled to a common feed signal, and further wherein each antenna element has a "multi-carrier" power amplifier operatively coupled therewith and mounted closely adjacent to the antenna element such that no appreciable power loss occurred between the "multi-carrier" power amplifier and the associated antenna element. Accordingly, Applicants respectfully request that the rejections of independent claims 1, 12 and 18 be withdrawn.

Even if each antenna (220) of Smith et al. were considered as having only a single antenna element, which Applicants do not concede, Smith et al., taken alone, or in combination with the other prior art of record, still fails to teach or suggest the combination of elements recited in each of independent claims 1, 12 and 18 and the rejections should be withdrawn.

Charas et al. is directed to a base station including a radio channel generating circuit for generating a plurality of individual radio channel signals each at a different frequency from one another. Each active array panel (95A, 95B and 95C) includes a plurality of RF power amplifiers (101) each coupled through a filter (102) to an individual radiating element (103).

Applicants respectfully submit that Charas et al. is completely silent with respect to the power amplifiers comprising "multi-carrier" power amplifiers as now claimed by Applicants. Moreover, Charas et al. taken alone, or in combination

with the other prior art of record, fails to teach or suggest the combination of elements recited in each of independent claims 1, 12 and 18 and the rejections should be withdrawn.

As claims 2-11, 13-17 and 19-21 depend from allowable independent claims 1, 12 and 18, respectively, and further as each of these claims recites a combination of elements not taught or suggested by the prior art of record, Applicants respectfully submit that these claims are allowable as well.

Conclusion

In view of the foregoing response including the amendments and remarks, this application is submitted to be in complete condition for allowance and early notice to this affect is earnestly solicited. If there is any issue that remains which may be resolved by telephone conference, the Examiner is invited to contact the undersigned in order to resolve the same and expedite the allowance of this application.

Applicants do not believe that this response requires that any fees be submitted, however, if any fees are deemed necessary, these may be charged to Deposit Account No. 23-3000.

Respectfully submitted,

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